WHAT IS CLAIMED IS:

1. A device for delivering a substance to a bone, the device comprising:

(a) a bone screw comprising two ends connected by a shaft, wherein the shaft is cannulated along at least a portion of its length;

(b) one or more bone-screw fenestrations disposed along the cannulated portion of the bone-screw shaft;

(c) an insert disposed inside the cannulated bone-screw shaft, wherein the insert is cannulated along at least a portion of its length; and

(d) one or more insert fenestrations disposed along the cannulated portion of the insert to provide a delivery pathway for the substance between at least one end of the bone screw and the at least one bone-screw fenestration.

2. The device of claim 1 wherein the insert partially blocks at least one bone-screw fenestration.

3. The device of claim 1 wherein the insert completely blocks at least one bone-screw fenestration.

4. The device of claim 1 wherein the cannulated portion of the bone-screw shaft extends through the entire length of the bone screw.

5. The device of claim 1 wherein the bone screw is a fixation screw.

6. The device of claim 1 wherein one end of the bone screw is self-tapping.

7. The device of claim 1 wherein the bone screw comprises a material selected from the group consisting of titanium and its alloys, tantalum and its

alloys, nickel-cadmium and its alloys, steel and its alloys, plastics, absorbable materials, resorbable materials, polyamino acids, polylactide, polyglycolide, hydroxylapatite, and tricalciumphosphate.

8. The device of claim 1 wherein the insert comprises a material selected from the group consisting of titanium and its alloys, tantalum and its alloys, nickel-cadmium and its alloys, steel and its alloys, plastics, absorbable materials, resorbable materials, polyamino acids, polylactide, polyglycolide, hydroxylapatite, and tricalciumphosphate.

9. The device of claim 1 further comprising a substance reservoir attached to at least one end of the bone screw.

10. The device of claim 9 wherein the reservoir is implanted subcutaneously.

11. The device of claim 1 further comprising a pump attached to at least one end of the bone screw.

12. The device of claim 11 wherein the pump is implanted subcutaneously.

13. A device for delivering a substance to a bone, the device comprising:

(a) a bone screw comprising two ends connected by a shaft, wherein the shaft is cannulated along at least a portion of its length;

(b) one or more bone-screw fenestrations disposed along the cannulated portion of the bone-screw shaft; and

(c) an insert disposed inside the cannulated bone-screw shaft, wherein the insert is cannulated along at least a portion of its length, and further wherein the insert is permeable to the substance to be delivered to the bone.

14. The device of claim 13 wherein the insert further comprises at least one insert fenestration disposed along the cannulated portion of the insert.

15. The device of claim 13 wherein the cannulated portion of the bone-screw shaft extends through the entire length of the bone screw.

16. The device of claim 13 wherein the bone screw is a fixation screw.

17. The device of claim 13 wherein one end of the bone screw is self-tapping.

18. A method of administering a substance to a bone, the method comprising:

(a) introducing a bone screw into a bone, the bone screw comprising two ends connected by a shaft, wherein the shaft is cannulated along at least a portion of its length, and further wherein the bone screw comprises one or more bone-screw fenestrations disposed along the cannulated portion of the bone-screw shaft;

(b) introducing an insert into the bone screw, wherein the insert is cannulated along at least a portion of its length, and further wherein the insert comprises one or more insert fennestrations along the cannulated portion of the insert; and

(c) introducing a substance into the cannulated portion of the insert.

19. The method of claim 18 wherein at least part of the insert is introduced into the bone screw prior to introducing the bone screw into the bone.

20. The method of claim 18 wherein at least part of the insert is introduced into the bone screw after introducing the bone screw into the bone.

21. The method of claim 18 wherein two or more bones are held in a fixed position relative to each other by the bone screw.

22. The method of claim 18 wherein a peripheral skeletal fracture is mended, an osteotomy is mended, a spondyloysis is repaired, an odontoid fracture repaired, or lumbar facet joints are fused by the insertion of the bone screw into the bone.

23. The method of claim 18 further comprising attaching a reservoir to at least one end of the bone screw or insert.

24. The method of claim 18 further comprising attaching a pump to at least one end of the bone screw or insert.

25. The method of claim 23 wherein the reservoir is implanted subcutaneously.

26. The method of claim 24 wherein the pump is implanted subcutaneously.

27. A method of administering a substance to a bone, the method comprising:

(a) introducing a bone screw into a bone, the bone screw comprising two ends connected by a shaft, wherein the shaft is cannulated along at least a portion of its length, and further wherein the bone screw comprises one or more bone-screw fenestrations disposed along the cannulated portion of the bone-screw shaft;

(b) introducing an insert into the bone screw, wherein the insert is cannulated along at least a portion of its length, and further wherein the insert is permeable to the substance to be administered; and

(c) introducing a substance into the cannulated portion of the insert.

28. A method of manufacturing a substance delivery device comprising :

(a) producing a bone screw comprising two ends connected by a shaft, wherein the shaft is cannulated along at least a portion of its length, and further wherein the bone screw comprises one or more bone-screw fenestrations disposed along the cannulated portion of the bone-screw shaft; and

(b) producing an insert that fits in the bone screw, wherein the insert is cannulated along at least a portion of its length, and further wherein the insert comprises one or more insert fennestrations along the cannulated portion of the insert.

29. A method of manufacturing a substance delivery device comprising :

(a) producing a bone screw comprising two ends connected by a shaft, wherein the shaft is cannulated along at least a portion of its length, and further wherein the bone screw comprises one or more bone-screw fenestrations disposed along the cannulated portion of the bone-screw shaft; and

(b) producing an insert that fits in the bone screw, wherein the insert is cannulated along at least a portion of its length, and further wherein the insert is permeable to the substance to be delivered.